Summary of Proposed Conceptual Changes (with brief justifications)
Office of Oil and Gas Management (OOGM)
Title 25 Pa. Code Chapter 78
Subchapter C. Environmental Protection Performance Standards

§ 78.2 Scope

- Propose amending the scope section to provide that Chapter 78 contains procedures and rules for activities associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

  Given the proposed changes herein to add sections regarding pipelines and water withdrawals, this amended scope section is needed to explain that Chapter 78 applies to not only the drilling, alteration, operation, and plugging of a well, but also to other oil and gas activities.

§ 78.15 Application Requirements

- Add the 2012 Oil and Gas Act 58 Pa.C.S. § 3211(b)(1)(2).

  This will help identify the different plat features and notification requirements for conventional and unconventional wells specified in 58 Pa.C.S. § 3211(b)(1)(2).

- Propose adding a requirement that a well operator identify on the well permit application the location of abandoned gas or oil wells within 1000 feet of the entire well bore length.

  This requirement comports with a recommendation made by STRONGER to prevent communication between wells.

- Propose adding regulations to this section for the Department to utilize for conditioning a well permit based on its impact to public resources identified in 58 Pa.C.S. § 3215(c) and for ensuring optimal development of oil and gas resources and respecting property rights of oil and gas owners. Also, for appeal to the Environmental Hearing Board of a permit containing conditions imposed by the Department. The regulations shall also provide that the Department has the burden of proving that the conditions were necessary to protect against a probable harmful impact of the public resources.

  This is in accordance with 58 Pa.C.S. § 3215(e).

- Propose adding regulations for best practices that must be utilized for the storage and handling of water, chemicals, fuels, hazardous materials or solid waste on a well site located in a floodplain to ensure the protection of the waters of this Commonwealth. The Department may request that the well site operator submit a plan for the storage and

handling of the materials for approval by the Department and may impose conditions or amend permits to include permit conditions as are necessary to protect the environment, public health and safety.

This is in accordance with 58 Pa.C.S. § 3215(f)(4).

§ 78.50. Well location restrictions.

- Propose adding a new section specifying the well location restriction requirements in Section 3215 of the 2012 Oil and Gas Act. As outlined in the statute, this section will contrast the traditionally required well location restrictions, which are now different, between conventional and unconventional oil and gas wells. Newly legislated distance restrictions involving floodplains, public and private water supplies and buildings will also be addressed in this section.

  This section would be in accordance of 58 Pa.C.S. § 3215.

§ 78.51. Protection of water supplies.

- Propose adding regulations to this section to ensure compliance with the 2012 Oil and Gas Act 58 Pa.C.S.§ 3218(a).

- Propose adding language to the requirement of notifying the Department within 24 hours of any water supply complaints a well operator receives, that it be by electronic means.

  This will ensure uniform and documented notifications to the Department of water supply complaints made to the well operator.

§ 78.52. Predrilling or prealteration survey.

- Propose to require the submission of chain-of-custody documentation with the results of the laboratory analysis.

  The chain-of-custody submission would ensure the integrity of the samples at the point of submission to a third party certified laboratory.

- Add the 2012 Oil and Gas Act requirements in 58 Pa.C.S. § 3218(c), (c.1) and (d).

  This will help identify the different criteria for presumption and defenses with conventional and unconventional wells.

- Add the 2012 Oil and Gas Act requirement in 58 Pa.C.S. § 3218(e.1).

  This requires an unconventional well operator to provide the Department proof of written notice to the land owner that presumption may be void if the landowner refuses to allow the operator to conduct a predrilling or prealteration survey.

§ 78.53. Erosion and sediment control.

- Propose to amend this section's cross reference to the requirements in Chapter 102 by stating that all earth disturbance activities associated with any oil and gas activities including pipelines, impoundments and supporting facilities, must comply with Chapter 102.

  This would assist operators with identifying applicable regulatory requirements, and reinforce the applicability of Chapter 102's requirements to all oil and gas activities under Chapter 78.

§ 78.55. Control and disposal plan.

- Propose changing the name of this Section to Preparedness, Prevention and Contingency (PPC) and Containment plans.

  This is to be consistent with the Pa.C.S. § 3218.2(b) requirement for unconventional well operators to submit a plan describing containment systems and practices along with the equipment utilized to prevent spills from leaving an unconventional well site. Also, Chapter 102.5 (l) requires a PPC Plan when storing, using or transporting industrial materials and waste on or from the project site during earth disturbance activities.

- Propose requiring the development of a site-specific PPC plan. Also add the 2012 Oil and Gas Act requirement for unconventional wells to also have a site-specific containment plan noting which containment systems and equipment will be utilized to contain, control and prevent spills from leaving the well site.

  This is to ensure an up-to-date and accurate PPC plan with all pertinent well site information is developed for each oil and gas site. This would also prevent the reliance by operators on generalized plans and the use of photocopied older plans with out-of-date and inaccurate information. In the case of unconventional well sites, this would ensure that the requirement for a containment plan in is met in accordance with 58 Pa.C.S. § 3218.2(b).

- Propose establishing the need to use existing Department guidance as the preferred standard for PPC plans by referencing the criteria outlined in the Department's Guidelines for the Development and Implementation of Environmental Emergency Response Plans (400-2200-001) and the Pennsylvania O&G Operator's Manual Chapter 4.

  This will ensure the PPC plans include enough information to satisfy the requirements of Pa.C.S. § 3218.2(b), Chapter 102.5 (l) and Chapter 91.34, and to provide an acceptable set of criteria to use for the development and review of said plans.

- Propose that copies of the site-specific PPC plan be available on site. Upon request, additional copies shall be sent to the Department, the local County Emergency Management Director, or the landowner.

  This is to ensure that the crucial information in the PPC Plans is available on site and that copies of the site-specific PPC plan be made available to the Department, County EMA or landowner upon request.

- Propose adding the requirement for site specific location information, i.e. well plats, GPS coordinates for the well site's points of entry and specific mapping requirements for the well site and locations of storage areas for compressed gasses, hazardous materials, pollutional substances and wastes, both solid and liquid at the well site.

  This is to allow for easy location and access to the well site and identification of items of concern in case of darkness, smoke, power outages, poor weather or other causes of poor visibility. Also to allow the Department to pinpoint potential sources of contamination after storage areas have been damaged, removed or buried.

- Propose adding a subsection titled Emergency Response Planning.

  Act 9 of 2012 requirements will be outlined in this section.

§ 78.56. Pits and tanks for temporary containment.

- Propose changing the name of this section to Temporary Containment.

  This is to be consistent with current and evolving industry containment practices and language in 58 Pa.C.S. § 3218.2.

- Add the 2012 Oil and Gas Act requirement that all unconventional well sites be designed and constructed to prevent spills to the ground surface or spills off the well site. This section will provide greater specificity of the containment practices and systems that must be employed at unconventional well sites.

  This is in accordance with 58 Pa.C.S. § 3218.2(a).

- Propose that all modular aboveground waste containment structures that are assembled on site may not be utilized to store waste without written authorization from the Department. The approval process will be done on forms provided by the Department. Also require a 3-day electronic notification prior to construction of these containment systems to allow the Department to inspect the location and foundation upon which these structures will be seated.

  This is to ensure that these storage structures are sound. There are many different designs in this category of tanks and they should be individually reviewed to ensure that they

meet minimum structural requirements prior to their use. Additionally, proper seating, operation and maintenance considerations should be reviewed prior to their implementation at each location.

- Propose that secondary containment is required for all tanks containing pollutional substances and wastes used for and generated from drilling and hydraulic fracturing activities, except freshwater.

  This is to provide an extra barrier of protection against pollution to the Waters of the Commonwealth in addition to the requirements for unconventional well sites in Pa.C.S. § 3218.2.

- Propose adding regulations to establish additional protective measures for temporary storage of hazardous chemicals and materials intended to be used, or that have been used, on an unconventional well drilling site within 750 feet of a solid blue lined stream, spring or body of water identified on the most current 7 1/2 minute topographic quadrangle map of the United States Geological Survey.

  This is in accordance with 58 Pa.C.S. § 3215(d.1).

- Propose requiring that secondary containment systems shall be inspected at least weekly and repairs made in a timely manner. Precipitation must be removed from secondary containment once the 10% of extra capacity to the required amount of secondary containment for the largest container is exceeded.

  This is to ensure that routine inspections and maintenance are conducted on secondary containment systems.

- Propose provisions to allow for the use of subsurface liners as secondary containment. These provisions shall provide for the optional use of liner leak detection systems and/or standard operational procedures to inspect and repair the liner system in order to verify liner integrity before and after a spill. Minimum permeability standards shall also be established in this section.

  This is to allow for additional containment practices to be utilized in conjunction with or in place of traditional surface secondary containment practices.

- Propose that for all temporary storage structures:

  - Gated fences shall completely surround pits capable of holding large volumes of fluid or intended to be utilized at sites with multiple wells to prevent unauthorized acts by third parties, unless a 24-hour presence is at the well site.
  - Warning signs shall be place on all sides of the pit.

- All tank valves and access lids to pollutional substances shall be locked to prevent unauthorized acts by third parties, unless a 24-hour presence is at the well site. Fresh water, fire prevention materials and spill response materials shall be excluded.

These measures are to prevent accidents and acts of vandalism.

- Propose, upon request of the Department, that the operator produce documentation of the containment liner's physical and chemical characteristics compatibility with the waste stored within it.

  This is to ensure that liners are designed to facilitate the waste material contained within them.

- Propose for unconventional well sites that a minimum of a 2:1 interior sidewall slope standard for incised temporary containment pits on a well pad and a 3:1 interior sidewall standard for temporary containment pits with at least one sidewall that shares an embankment of a well pad on unconventional well sites.

  This is to ensure the structural integrity of the temporary containment pits on unconventional well sites, which are larger than those on conventional well sites.

- Propose that the owner or operator shall notify the Department at least 3 business days before the installation of the pit liner. This notice shall be submitted to the Department by electronic means.

  This will allow for inspections of the pit to ensure that the sidewalls, including the slopes, are properly constructed and that the sub-base is free of obstructions and properly lined with acceptable bedding material.

- Propose that operators demonstrate to the Department that temporary containment pit bottoms are kept 20 inches above the seasonal high groundwater table. This will be achieved through soil mottling or other acceptable methods to the Department and also be performed by a qualified person. These reports shall be submitted to the Department within 60 days from the excavation of the pit. Existing rule that allows for a seasonality exemption to be considered will be maintained.

  This will ensure that pits always meet the 20-inch seasonal high groundwater table requirement year-round for the primary purpose of preventing stored wastes from entering the groundwater table.

§ 78.57. Control, storage and disposal of production fluids.

- Propose that the use of pits for storage of produced fluids be eliminated.

  The long-term storage of production fluids in a pit presents an unacceptable risk to the environment through leaks or overtopping of the pit.

- Propose that all tank valves and access lids shall be locked to prevent unauthorized acts by third parties.

  The purposes of these measures are to prevent accidents and acts of vandalism.

- Propose that for all new aboveground storage tanks containing fluids produced during operation, servicing, or plugging of the well, that the owner or operator shall construct and maintain a dike, or other method of secondary containment, which satisfies American Petroleum Institute Standards or equivalent around the tank or tanks that will prevent the tank contents from entering Waters of the Commonwealth.

  The purpose of this section is to require minimum secondary containment standards for all new permanent storage tanks containing all produced fluids, not just oil. There are tens of thousands of tanks containing produced fluids that have no adequate secondary containment, which has resulted in numerous spills and releases of produced fluids to the environment over many decades. Many tanks that do have secondary containment have ineffective diking systems that provide little or no containment of spilled produced fluids. One example would be dikes that are constructed out of high permeability fill material that is often times conveniently obtained during well site preparation and construction.

- Propose that the containment area provided by the dikes or other methods of secondary containment shall have containment capacity sufficient to hold the volume of the largest tank plus 10% for precipitation.

  Minimum secondary containment volumes are critical to ensure the effectiveness of the containment and to prevent spills and releases entering Waters of the Commonwealth.

- Add the 2012 Oil and Gas Act requirement that all permanent aboveground and underground storage tanks (regardless of their volume or associated formation), must comply with the applicable corrosion control requirements in the Department's tank regulations, Chapter 245.432.

  This is in accordance with 58 Pa.C.S. § 3218.4(b).

- Propose that for underground storage tanks, leak detection is provided and that all storage tanks must meet all construction standards outlined in API standards or equivalent as determined by the Department.

  Currently underground produced fluid tanks have no regulatory standards and the Department has no reasonable way of determining if the underground storage tanks are leaking. Current API standards for aboveground and underground storage tanks will be used as the benchmark for future produced fluid storage tanks.

- Propose adding regulations to establish additional protective measures for permanent storage of hazardous chemicals and materials intended to be used, or that have been used, on an unconventional well drilling site within 750 feet of a solid blue lined stream, spring

or body of water identified on the most current 7 1/2 minute topographic quadrangle map of the United States Geological Survey.

This is in accordance with 58 Pa.C.S. § 3215(d.1).

§ 78.58. Existing pits used for the control, storage and disposal of production fluids.

- Propose deleting this section.

  The long-term storage of production fluids in a pit presents an unacceptable risk to the environment through leaks or overtopping of the pit.

§ 78.59. Centralized Impoundment Standards. [New Section]

- Propose that no well operator shall construct or operate a centralized freshwater or wastewater impoundment associated with oil and gas activities without a permit or registration with the Department.

  The purpose of this proposed provision is to require documentation of the location of centralized freshwater impoundments. Currently, unless a centralized freshwater impoundment triggers the Chapter 102 or the Chapter 105 permit requirements, these facilities are constructed without notice to the Department. Centralized wastewater impoundments currently require a Chapter 105 permit. This proposal codifies that requirement in Chapter 78.

- Propose that all impoundments (freshwater and wastewater) meet specific standards for construction and restoration.

  The purpose of this proposal is to codify existing construction standards for centralized wastewater impoundments in Chapter 78. Currently there are no construction standards for centralized freshwater impoundments that do not require a dam permit under Chapter 105. This provision will give the Department the ability to track these facilities to ensure their proper construction and restoration.

§ 78.59a Onsite Wastewater Processing [New Section]

- Propose that written approval is required on forms provided by the Department to process wastewater on the well site that was either generated by the drilling or completion of wells on that well site or used to stimulate wells on that well site. Propose that all other onsite wastewater processing facilities must comply with the requirements under the Solid Waste Management Act.

  The purpose of this proposed amendment is to clarify the permit requirements for onsite wastewater processing facilities.

§ 78.60. Discharge requirements.

- Propose the requirements in this section must be documented and shall be made available to the Department upon request.

  This is to ensure that the tophole discharge requirements outlined in this section are followed and can be verified.

§ 78.61. Disposal of drill cuttings.

- Propose that no drill cuttings be imported from or transported to another well site.

  This is to prevent the proliferation of well sites becoming waste treatment facilities. Sites permitted under the Solid Waste Management Act shall be used for the processing and treatment of drill cuttings from multiple well sites.

- Propose that the owner or operator notify the Department at least 3 business days before the use of solidifiers, dusting, unlined pits, attenuation or other alternative practices for the on-site disposal of drill cuttings or other residual wastes. This notice shall be submitted to the Department electronically through its website.

  This will allow for inspections to ensure that the site-specific authorization and conditions are properly followed.

- Propose that drill cuttings from the horizontal portion of unconventional wells cannot be disposed of on-site.

  This will prevent potential pollution from encapsulated shale cuttings on well sites.

- Propose that landowner consent be obtained prior to encapsulation, dusting or land application of drill cuttings from below the casing seat on the well site.

  This is to ensure that the landowner is aware of and approves the encapsulation, dusting or land application of drill cuttings as part of the restored well site.

- Propose that for unconventional wells, any testing requirements under this section (drill cuttings from below the casing seat) be submitted to the Department as part of the well site restoration report.

  This is to ensure that waste disposed of onsite has been properly tested to demonstrate compliance with applicable regulations.

§ 78.62. Disposal of residual waste—pits.

- Propose that the word "production" be removed from § 78.62(a)(1).

This to stop the practice of disposing production waste on a well site, such as paraffin, oil or production fluid solids.

- Propose that the owner or operator notify the Department at least 3 business days before encapsulating the waste within the pit liner. This notice shall be submitted to the Department electronically through its website.

  This is to ensure that all conditions and tests required in § 78.62 are met prior to encapsulation and that the site specific OG-71 (if applicable) and conditions set forth in it are properly followed.

- Propose that the owner/operator of an unconventional well provide documentation of compliance with § 78.62(b)(1-4) to the Department as part of the well site restoration report.

  This is to ensure that all tests required in § 78.62(b)(1-4) are conducted and that the sample results are satisfactory to the Department.

- Propose reviewing and possibly amending the testing requirements required in § 78.62(b)(1-4).

  This is to ensure that residual waste being buried on site is properly characterized.

- Propose that landowner consent be obtained prior to encapsulation of residual waste on the well site.

  This is to ensure that the landowner is aware of and approves the encapsulation of residual waste as part of the restored well site.

§ 78.63. Disposal of residual waste—land application.

- Propose that the owner/operator of an unconventional well provide documentation of compliance with § 261.24 Table I to the Department as part of the well site restoration report.

  This is to ensure that all tests required in § 261.24 Table I are conducted and that the sample results are satisfactory to the Department.

- Propose reviewing and possibly amending the testing requirements required in § 78.63(b).

  This is to ensure that residual waste being incorporated into the site is properly characterized.

- Propose that the land application area shall be restored to conditions that support the same potential uses of the land that existed prior to earth disturbance.

This is to prevent the loss of potential uses of land in the future.

- Propose that landowner consent be obtained prior to land application of residual waste on the well site.

  This is to assure that the landowner is aware of and approves the incorporation of residual waste as part of the restored well site.

§ 78.65. Site restoration.

- Propose that only one extension of up to 2 years to the normal 9-month restoration period be granted and not exceed the statutory timeframe for an extension.

  This is to ensure that well pads are reclaimed within a reasonable timeline and avoids the allowance for a well pad to remain open indefinitely.

- Add the 2012 Oil and Gas Act requirements that a site restoration plan be submitted at the time of an extension request outlining the interim measures to be taken during the proposed extension period.

  This is in accordance with 58 Pa.C.S. § 3216(g).

- Propose that stone borrow pits used for constructing well pads and access roads obtain any necessary Department non-coal mining permits. If non-coal mining permits are not required, the stone borrow pit owner or operator must still follow Department non-coal construction and restoration standards, including erosion and sedimentation control best management practices.

  Currently, there are no standards for the construction or restoration of these facilities. This is to ensure borrow pits used for well site and access road construction are built in a safe and environmental protective manner and that they are restored after they cease to be utilized for oil and gas operations.

- Propose that well site restoration includes reducing the size of the well site. This reduced well site may contain necessary production facilities and equipment, and service vehicle access including a 3-point turn around. Restored areas are to be returned to approximate original contours and capable of supporting the uses that existed prior to drilling the well. Post construction stormwater management inspections and post construction coefficient values shall be considered when determining the effectiveness of a restoration.

  This provision provides clarity regarding what constitutes well site restoration that is required in 58 Pa.C.S. § 3216.

- Propose that within 9 months after plugging a well(s), the owner or operator shall remove all production or storage facilities, supplies and equipment, including hardened structures (i.e. concrete foundations) and pipelines located on the site, and restore the site.

This is to ensure that former well sites are restored back to their original state.

§ 78.66. Reporting releases.

- Propose adding requirements establishing the volume of material that must be reported and the remediation procedure to be used in the event of spills and releases of pollutional substances and wastes associated with oil and gas activities.

  The purpose of this provision would be to establish clear and explicit procedural guidelines for operators to demonstrate compliance with the standards in the Land Recycling and Environmental Remediation Standards Act (Act 2) or alternative cleanup standards approved by the Department.

- Propose adding the requirement that the responsible party for the release must call the appropriate DEP regional office or statewide 1-800 number when reporting a release. Also specify the need to talk to a person and the time frame a release needs to be reported.

  This is to ensure proper notification of spills/releases to the Department in accordance with existing regulations and the Oil and Gas Spill Policy.

- Propose adding specific language to this section outlining exactly what information needs to be reported to the Department when reporting a release. Examples are responsible party information; date, time and location (911 address, GPS coordinates, road name and/or mile marker, etc.) of the incident; responsible party contact information; permit number; nature of the incident and what threats to public health and the environment does it pose; nature of any injuries; estimate of volume and types of pollutants released, preliminary clean up response, etc.

  This is to ensure the consistent reporting of spill/release information statewide.

  Propose adding language that the Department must be notified prior to the processing or disposal of any waste generated as a result of a spill/release and that all associated field and sample results be submitted to the Department along with documentation of disposal.

  This is to ensure that the Department is made aware that the waste generated as a result of a spill or release is properly disposed.

§ 78.67. Waterways and Wetlands Encroachments. [New Section]

- Propose that when a waterway or wetland is crossed or encroached for any oil and gas related activity, the operator shall comply with Chapters 102 and 105.

  This is to notify operators that all applicable regulations in Chapters 102 and 105 must be followed when waterbodies and wetlands are encroached.

§ 78.68. Pipelines [New Section]

- Propose a new section that provides that in addition to the requirements in Chapter 78, all applicable regulations and requirements in Chapters 102 and 105 apply to pipelines associated with oil and gas activities.

  This is to notify operators of these necessary regulatory obligations.

- Propose that earth disturbance associated with pipeline installation be limited to the construction right-of-way, work space areas, pipe storage yards, borrow and disposal areas, access roads and other identified areas necessary for the scope of work.

  This is to ensure awareness of these necessary regulatory obligations, including making sure that any earth disturbance activities associated with pipelines are narrow in scope, regardless of the project size, including those that may not be subject to Departmental review prior to construction and are in compliance with existing requirements for earth disturbance activities less than five acres in size.

- Propose requiring the use of highly visible flagging and/or signage marking the boundaries of sensitive resource areas, including water bodies, wetlands, agricultural drain tiles, irrigation systems and locations of threatened/endangered species, within the limit of disturbance, prior to land clearing and throughout earth disturbance activities.

  The reason for requiring highly visible flagging and signage is to prevent the unnecessary destruction of Commonwealth resources and to maximize the protection of existing drainage features and vegetation.

- Propose that the refueling of any equipment shall not occur within 100 feet of any wetland or body of water.

  This is to prevent potentially pollutional activities from occurring near Waters of the Commonwealth.

- Propose requiring that all water diversion structures and pipeline trench dewatering discharge points be diverted away from all sensitive resource areas, waterbodies, wetlands, agricultural drain tiles and locations of threatened/endangered species. Also, erosion and sedimentation control best management practices shall be implemented at the discharge points.

  This measure is to prevent pollution of the Waters of the Commonwealth and impact to sensitive habitats.

- Propose requiring the need to test topsoil and subsoil for compaction at regular intervals in areas disturbed by construction activities to determine the need for corrective action.

Testing for compaction is required to ensure the water infiltration rates of the soil have not been adversely impacted and also to ensure that subsidence/compaction will not occur in the future. This is consistent with FERC regulations and Chapter 102.4(b)(4)(iii).

- Propose requiring the separation of topsoil and subsoil during excavation. Topsoil and subsoil must remain segregated until restoration. Topsoil cannot be used as bedding for pipelines. Native topsoil or imported topsoil of equal or greater quality must be used to ensure the land is restored to the potential uses that existed prior to earth disturbance.

  This measure is to promote the conservation of topsoil.

- Propose requiring a plan to identify agricultural drain tiles and irrigation systems prior to construction activities with measures to prevent their damage or loss of use during construction activities. Allow for alternate measures to improve existing drainage conditions or restore traditional drainage patters when warranted and approved by the Department, County Conservation District, Department of Agriculture, and/or other agencies that may have jurisdiction.

  This is to prevent the alteration of established drainage patterns in agricultural areas and loss of use of irrigation systems. Also to allow for improving or restoring drainage patterns.

- Propose that the operator is responsible to reclaim all points of access or to place reasonable security measures (i.e. locked gates, jersey barriers, earth mounds), in conjunction with the property owner, to limit motor vehicle access to the pipeline right-of-way. Permanent features, i.e. signs, gates, markers and access roads shall be maintained throughout the life of the pipelines. Exceptions may be provided by the Department or County Conservation District at the written request of the landowner.

  This promotes safety and helps prevent future erosion by denying unauthorized motor vehicle access to the pipeline right-of-way.

- Propose that all buried metallic pipelines shall be installed and placed in operation in accordance with 49 CFR Pt. 192 or 195 (relating to the requirements for corrosion control).

  This is in accordance to 58 Pa.C.S. § 3218.4(a).

Horizontal Directional Drilling of Pipelines

- Propose that horizontal directional drilling associated with oil and gas activities be conducted according the requirements in Chapter 78 as well as according to the requirements in Chapter 102 and 105.

- Propose that at least a 24-hour notification be made to the Department and PA Fish & Boat Commission prior to commencement of any horizontal directional drilling activities, including conventional boring, near waterways and water bodies. This notification will require information on where (GPS coordinates) and when the horizontal directional drilling will commence and shall be made electronically to the Department.

  This is to ensure that the Department is aware of the drilling activity and can make timely proactive inspections of such activities.

- Propose allowing that an inadvertent return contingency plan may be submitted with any Chapter 105 General Permit 5 or Erosion & Sedimentation Control General Permit (ESCGP) application, which may be implemented in lieu of a Chapter 105 Emergency Permit when and inadvertent return occurs. An inadvertent return contingency plan must be present on site in order for it to be implemented during horizontal drilling activities.

  This is to help mitigate the impact of inadvertent returns by enabling operators to immediately implement response measures and also allow the Department to evaluate the preventative measures being taken during horizontal drilling activities.

- Propose that the operator conduct continuous inspections of the drilling operations (including drilling pressures and fluid returns), all water bodies in close proximity, and the surrounding area for any signs an inadvertent return during horizontal drilling operations. Documentation of such inspections shall be made available to the Department upon request.

  This is to help lessen the impact of inadvertent returns by ensuring quicker detection of inadvertent returns and response times.

- Propose that materials staging areas be outside of the jurisdictional floodway or edge of a wetland or waterbody.

  This will help preserve the structural integrity of the waterway, preserve the riparian buffer and prevent potential pollutants from impacting the water resource.

- Propose that the all required permits and Material Safety Data Sheets (MSDS) are on site and made available to the Department upon request.

  This is to aid the inspector in determining all activities and chemicals used during the operation are approved by the Department.

- Propose that all horizontal directional drilling fluid additives, other than Bentonite, used for horizontal drilling activities must be approved by the Department prior to their use. Preapproved horizontal directional drilling fluid additives shall be listed on the Department's web site.

This will help prevent to introduction of potentially toxic additives to the Waters of the Commonwealth.

- Propose requiring all inadvertent returns be immediately reported to the Department and establishing the Oil and Gas Spill Policy as the standard reporting/remediation process that is acceptable to the Department.

  This is to clarify that the Department views all inadvertent returns as a potential pollution threat to the Waters of the Commonwealth as must be treated as such.

- Propose that the products of horizontal directional drilling returns or of an inadvertent return be considered as a residual waste that must be contained, stored, transported and disposed of as such, unless reused during the drilling process. Onsite treatment and disposal of the drilling materials may be approved by the Department if only Bentonite, water and Department approved additives are used during the drilling process. Testing and documentation as required in § 78.60(b)(1-4) must be conducted prior to dispersing the liquid fraction of the drilling materials to the environment in a responsible manner, as required in § 78.60(a)(b)(5-7). The dewatered solid portion of the drilling materials may be reincorporated into the subsoil, while back filling the pipeline trench, if the parameters in § 78.60 for the water fraction are met and the solids are mixed at a ratio no greater than 1:1 with the subsoil.

  This is to prevent the introduction of pollutional substances into Waters of the Commonwealth and the surrounding landscape without proper testing, treatment and disposal methods as approved by the Department.

- Propose that when an inadvertent return is discovered, the Department shall review the inadvertent return contingency plan with the operator as soon as practicable.

  This will help reduce the potential impact of future inadvertent returns by allowing the Department to review and critique the inadvertent return contingency plan as it is being implemented and to also evaluate its overall effectiveness after the response.

Temporary Pipelines

- Propose that well operators construct and operate temporary pipelines associated with oil and gas activities in accordance with the requirements in this section as well as in accordance with the requirements in Chapter 102 and 105.

  The purpose of this provision is to notify operators of the applicable regulatory requirements for this activity.

- Propose that companies notify the Department of the locations of all temporary pipelines used for oil and gas activities at all wetland and waterway crossings. Approximate timelines for their intended use should also be included.

  This will allow the Department to inspect these installations for potential impacts to the environment.

- Propose that temporary lines be pressure tested prior to use.

  This is to ensure that temporary lines are structurally sound.

- Propose that the section of temporary pipeline carrying any wastewater over a waterway or wetland shall be singular and not have joints or couplings suspended over the waterway or wetland and that shut off valves shall be installed near both sides of the crossing.

  This is to prevent allowing a source for leaking of wastewater or a point of failure to be directly over a waterway. Also to allow the section of temporary pipeline that poses the greatest threat to Water of the Commonwealth to be isolated.

- Propose requiring weekly inspections of temporary pipelines by the operator and that documentation of the inspection results are made available to the Department upon request.

  The permitee has to verify and document that the temporary pipelines are properly functioning as designed on regular time intervals.

- Propose that shut off valves be located at regular intervals throughout the entire length of a temporary pipeline. Required minimum interval lengths will be determined by the diameter of the temporary pipeline.

  This is to allow the ability to isolate any section of a leaking temporary pipeline.

- Propose that highly visible flagging be placed at regular intervals along the entire length of the temporary pipeline.

  This is so unaware parties can safely identify the presence of a temporary pipeline to avoid incidental encounters, which may compromise the integrity of the temporary pipeline.

- Propose that temporary pipelines not in use for more than 72 hours be emptied and depressurized.

  This is to prevent contents from turning septic and also leaking.

Propose that all temporary pipelines (≤ 18 months) be installed aboveground with exceptions to be made for roads and railways.

This is to ensure that leaks in temporary pipelines can be easily detected and serviced. This will also prevent the abandonment of temporary pipelines after their usefulness has ceased.

- Propose that a Chapter 105 permit must be obtained by the Department prior to placing a temporary pipeline through any culvert, roadside ditch, dry streambed or any other stormwater collection/conveyance system.

  This is to ensure that the temporary pipeline is not displacing the design capacity of the stormwater collection/conveyance system. This measure is to prevent localized flooding, accelerated erosion or damage to the stormwater collection/conveyance system.

§ 78.69. Water Management and Use (Water Management Plans) [New Section]

- Propose to create a new section in the Chapter 78 regulations in order to clarify and give regulatory framework to Water Management Plans in order to protect Waters of the Commonwealth in accordance to the act of June 22, 1937 (P.L. 1987, No. 394), known as the Clean Stream Law and 58 Pa.C.S. §§ 3201-3274 (2012 Oil and Gas Act); and to otherwise protect public health, safety and welfare.

  The purpose of this new section is to codify Water Management Plan requirements in regulation per 58 Pa.C.S. § 3211(m).

- Add the 2012 Oil and Gas Act requirement that all persons that withdrawal or use water from water sources within this Commonwealth must have a Department approved Water Management Plan prior to drilling, hydraulic fracture stimulation of any oil or gas well in any unconventional formation.

  The purpose of this section is to clearly define who will need to have a Water Management Plan and for what types of activities. This proposed requirement is in accordance with 58 Pa.C.S. § 3211(m).

- Propose requiring Water Management Plan applicants to demonstrate that the requested withdrawals are reasonably related to drilling, hydraulic fracture stimulation of an unconventional oil or gas well in their Water Management Plan application.

  This proposed requirement is necessary because some applicants are requesting to withdraw for large quantities of water that cannot reasonably be used in the drilling, hydraulic fracture stimulation of oil and gas wells in an unconventional formation. Obtaining the applicant's proposed use of the water will enable the Department to properly assess the requested withdrawal amounts and water uses, especially during times of low-flow conditions.

- Propose requiring those applicants that are subject to a Water Management Plan to set forth a plan to conduct continuous monitoring and recording of all water source withdrawals and purchases (via continuous-recording device or a flow meter) and monitoring of instream flows as required.

  This requirement is necessary to prevent excessive withdrawals during critical low flow periods and potentially causing the water source to not meet its attained use. This ensures real time accountability for withdrawals. Furthermore, documentation of this information is necessary to ensure appropriate tracking of water and is an important tool for compliance and enforcement. This is also in accordance with 58 Pa.C.S. § 3211 (m)(2).

- Propose requiring those applicants that are subject to a Water Management Plan to submit monthly reports, consisting of daily withdrawal volumes, in-stream flow measurements and/or water source purchases, to the Department.

  This requirement is to ensure timely withdrawal accountability and to ensure withdrawals in violation of the Water Management Plan are responded to in a timely manner by the Department. Documenting this information is necessary to ensure appropriate tracking of water and is an important tool for compliance and enforcement.

- Propose maintenance and protection of groundwater and water supply wells and require that new groundwater sources meet specific construction standards and will be required to undergo and complete either the Susquehanna River Basin Commission (SRBC) aquifer testing standards or the requirements in the Department's Public Water Supply Manual (ID#383-2125-108, Chapter III, Section D. Groundwater Sources, items 1 through 3) for groundwater.

  This requirement is being proposed in order to protect groundwater aquifers from excessive withdrawal rates past the safe yield of an aquifer, thus causing permanent damage to the aquifer by permanently reducing storability and permeability of aquifers where ground water wells are constructed. Also, by requiring minimum well construction standards, they will help prevent aquifer contamination through poorly constructed water wells. Improper water well construction can act as a conduit of pollution into the aquifer. Furthermore, this promotes consistency on how groundwater withdrawals and protections are conducted and documented throughout the Commonwealth.

- Add the 2012 Oil and Gas Act requirements for appropriate coordination of efforts with federal-interstate compact agencies, including the Susquehanna River Basin Commission, the Delaware River Basin Commission or the Great Lakes Commission regarding the proposed Water Management Plan. The Department's Water Management Plan criteria is presumed to be achieved if the proposed water withdrawal has been approved and is operated in accordance with conditions established by said agencies. However, the Department reserves the right to attach additional measures to any federal-interstate compact agencies' approved plan.

This requirement ensures coordination and cooperation between all relevant regulating organizations, which obviously improves efficiency and prevents duplication of efforts between regulating entities. This is in accordance with 58 Pa.C.S. § (m)(3)(i)(ii).

- Add the 2012 Oil and Gas Act requirements that operators develop a reuse plan for fluids that will be used to hydraulically fracture an oil or gas well in an unconventional formation. A wastewater source reduction plan developed in compliance with the Department's 25 Pa. Code Chapter 95.10(b) will satisfy the reuse plan requirement.

  This is in accordance with 58 Pa.C.S. § 3211(m)(2)(iv) and utilizing the Department's 25 Pa. Code Chapter 95.10(b) requirement will avoid any duplication of efforts.

- Propose requiring an Operations Plan (including, but not limited to: intake design, flow schematic showing how water is to be withdrawn, site layout and footprint) for each surface water withdrawal along with each Water Management Plan.

  The Operations Plan requirement will compel the applicant to give a detailed account of how the water will be physically withdrawn from the approved source. This way the Department can ensure that the actual withdrawal mechanism is not causing harm to the source. Attaching approved Chapter 105 General Permits 4 & 5 permit application materials will help facilitate meeting this requirement.

- Propose the posting of appropriate signage at surface water withdrawal locations.

  Clearly marking the withdrawal point makes it easy for Department staff (and other agencies) to determine where the approved withdrawal point actually is and that it is being properly maintained.

- Propose that the Department shall have the authority to suspend or revoke a Water Management Plan if the conditions set forth in the Department approved Water Management Plan are violated.

  In order to protect water resources from non-compliers, the Department must have the authority to suspend or revoke a Water Management Plan.

- Propose adding regulations that the Department shall have the authority to suspend or revoke a Water Management Plan's approved source(s) if no water withdrawal or use has occurred within four years of approval.

  In order to allow for others to withdrawal or use water from a water source, the Department must have the authority to suspend or revoke approved sources that are not being used. This is in accordance with 58 Pa.C.S. § 3211(m)(3)(ii).

- Propose that the Department shall have the authority to deny a Water Management Plan if the application is deemed incomplete, the proposed activity poses a potential threat to the

environment or the applicant has demonstrated continued non-compliance with the Department's rules and regulations.

In order to protect water resources, the Department must have the discretion to deny a Water Management Plan. This is in accordance to 58 Pa.C.S. § 3211(m)(3)(ii) affording the Department the right to establish additional requirements to comply with the laws of this Commonwealth.

- Add the 2012 Oil and Gas Act requirements that compliance with an approved Water Management Plan shall be a condition of any permit issued under Chapter 32 of Title 58 of the Pennsylvania Consolidated Statutes, 58 Pa.C.S. §§ 3201-3274, for the drilling or hydraulic fracture stimulation of any unconventional oil or gas well.

  This is in accordance with 58 Pa.C.S. § 3211(m)(4).

§ 78.70. Roadspreading of Brine for Dust Control and Road Stabilization [New Section]

- Propose elevating to regulatory status the current policies in the Oil and Gas Operators Manual.

  Purpose is to raise the current policy, including submittal of a Brine Spreading Plan on an annual basis, to the level of regulations thus allowing for consistent regulation and enforcement from the Department.

- Propose requiring that roadspreading operations do not result in pollution of the Waters of the Commonwealth in accordance with Section 401 of the Clean Streams Law.

  Purpose of this section is to provide the legal standard from the Clean Stream Law that these activities must achieve.

- Propose requiring that the well owner or operator who spreads brine from oil and gas wells must submit a plan on forms provided by the Department (5500-PM-OG82), on an annual basis, to the Department for approval before roadspreading can begin.

  Purpose of requiring a plan is to ensure that brine is spread in a manner that does not pose a threat of pollution to the Waters of the Commonwealth.

- Propose that all initial and annual plan submittals should include mapping of the spreading route on both the most current USGS 7.5 Minute Topographic Mapping and the most current National Wetland Inventory (NWI) 7.5 Minute Mapping. Both may be included, but if only one mapping format is submitted, it must be the NWI.

  It is critical that the Department be able to determine where brine is actually being spread in relation to streams and wetlands in order to protect the Waters of the Commonwealth.

- Propose requiring a chemical analysis of the brine using a list of parameters developed by the Department.

  The purpose of this section is to ensure that brine is chemically characterized by what type of contaminants it contains, not just by formation. Currently brine is sampled for only a few parameters.

- Propose stipulating that all plans will expire on December 31st for the calendar year roadspreading was requested.

  This is to ensure that the information contained in a Brine Spreading Plan is current and to reflect any changes in land use in the Plan (i.e. dirt road relocations or additions).

- Propose specifying detailed spreading requirements including rate and frequency, spreading equipment, maximum grades, and weather conditions at time of spreading.

  This is to ensure that sufficient detail is provided to the Department to ensure that brine is spread in a manner (rate, grades, frequencies, weather conditions, etc.) that will not pollute the Waters of the Commonwealth.

- Propose stipulating that only production brines may be used from approved formations (OG-82). Fluids from unconventional formations may not be utilized for road spreading.

  The purpose of this section is to ensure that concentrated brines from certain formations that contain unacceptable levels of one or more contaminants are not used for road spreading. This provision also eliminates the use of brines obtained during the flowback process.

- Propose stipulating that brine shall not be applied within 150 feet of a stream, creek, lake or other body of water.

  Minimum isolation distance for spreading is necessary to protect Waters of the Commonwealth.

- Propose requiring that each vehicle utilized to spread brine shall have a clearly legible sign identifying the applicator on both sides of the vehicle.

  Vehicles marking requirements are required for accountability and visibility for the Department and the public's benefit.

- Propose requiring that the entity spreading the brine shall notify the appropriate regional DEP Oil and Gas Office during normal business hours at least 24 hours before spreading brine. This notification will require actual contact with and/or verbal recognition of the notification by an appropriate DEP Oil and Gas employee and information on where and

when the spreading will start if it varies from the approved plan. Electronic notification may also be allowed.

The purpose of spreading notification is to alert the appropriate Water Quality Specialist of brine spreading to facilitate proper inspection of this activity by the Department.

- Propose requiring that the entity that received the approval of the roadspreading plan shall submit a monthly report on forms provided by the Department (5500-FM-OG0046) to the Department indicating the location and the amount of brine spread during the month.

  Monthly reporting is necessary to ensure timely accountability for spreading activities and to allow the Department to respond to discrepancies in a timely manner.

- Propose that failure to comply with all these conditions may result in the Department rescinding the plan approval.

  The Department must have the authority to rescind or revoke the plan, when justified, in order to protect the Waters of the Commonwealth.